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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,649	04/30/2007	David Srodzinski	66001(50024)	2748

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EXAMINER	
CHENG, CHI TANG P	

ART UNIT	PAPER NUMBER
2463	

MAIL DATE	DELIVERY MODE
10/14/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/587,649	SRODZINSKI, DAVID	
	Examiner	Art Unit	
	PETER CHENG	2463	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-10** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,741,566 B1 to Furlong et al.

3. **As to Claim 1**, Furlong discloses a method of communicating information within a physical link layer of a packet based communication system, comprising the steps:

a) Employing a physical link layer transmitter (col. 2, lines 55-64, disclosing employing a "sending device" and Fig. 6, “tx mgmt packet inserter 120B1/A2”, disclosing a physical link layer transmitter) to substitute an additional input data field within an idle data field (col. 2, line 55 - col. 3, line 4 and Fig. 2, disclosing a "WAN management packet frame 70", i.e., an additional input data field, inserted within the Interpacket Gap IPG 80, i.e., an idle data field) of a data stream transmitted within (Fig. 2, disclosing a data stream) the packet based communication system (Fig. 1, “50” and col. 2, lines 12-25, disclosing an Ethernet network, i.e., a packet based communication system); and

b) Employing a physical link layer receiver (col. 2, lines 61-64 and Fig. 6, “rx mgmt packet extractor 120A1/B2”, disclosing a physical link layer receiver) to extract the additional input data field without corrupting information contained within the data stream (col. 2, lines 61-64, disclosing the "sending device" extracting the WAN management packet and then "reconstituting" the original IPG, thus disclosing “to extract the additional input data field without corrupting information contained within the data stream”).

4. **As to Claim 2**, Furlong discloses the method as in the parent claim 1.

Furlong further discloses wherein the step of substituting an additional input data field within an idle data field comprises the steps:

a) Detecting one or more idle data field characters (col. 2, lines 55-58 and col. 3, lines 34-37, disclosing determining that the Interpacket Gap comprises "idle bytes", i.e., detecting one or more idle data field characters); and

b) Replacing the one or more idle data field characters with one or more physical link layer data characters (col. 2, lines 55-64 and col. 3, lines 34-37, disclosing inserting and “replacing” the “idle bytes” with WAN management packet bytes, i.e., one or more physical link layer data characters).

5. **As to Claim 3**, Furlong discloses the method as in the parent claim 2.

Furlong further discloses wherein the one or more idle data field characters to be replaced are located within two or more of the idle data fields (Fig. 2 and col. 2, lines 19-40, disclosing the WAN management packet frames 70 being generated to constitute a "WAN management channel" that “exists between … the network format data packets”,

i.e., the WAN management packet frames 70 replace idle bytes in two or more IPGs, i.e., idle data fields).

6. **As to Claim 4**, Furlong discloses the method as in the parent claim 2.

Furlong further discloses wherein the step of extracting the additional input data field without corrupting information contained within the data stream comprises the steps of:

a) Detecting one or more physical link layer data characters (col. 2, lines 61-64, disclosing detecting the WAN management packet bytes, i.e., the physical link layer data characters); and

b) Extracting and replacing the one or more physical link layer data characters with idle field characters (col. 2, lines 61-64, disclosing extracting the WAN management packet frames, i.e., the physical link layer data characters, and "reconstituting the original IPG", i.e., replacing with idle field characters).

7. **As to Claim 5**, Furlong discloses the method as in the parent claim 2.

Furlong further discloses wherein the step of replacing the one or more idle field data characters with the physical link layer data characters comprises replacing one or more idle field data characters with a start data insertion multiplexer character (Fig. 2, “SOF 71” and col. 2, line 65 – col. 3, line 4, disclosing inserting a WAN management frame that includes a SOF start of frame delimiter byte, i.e., replacing one or more idle field data characters with a start data insertion multiplexer character).

8. **As to Claim 6**, Furlong discloses the method as in the parent claim 5.

Furlong further discloses wherein the step of replacing the one or more idle field data characters with the physical link layer data characters further comprises replacing one or more idle field data characters with a data control character (Fig. 2, "CMD 72", "HOP 73" and "ADDRESS 74", each disclosing a data control character and col. 2, line 65 – col. 3, line 4, disclosing inserting a WAN management frame that includes a command/response value 72, address value 74, each such value disclosing a data control character).

9. **As to Claim 7**, Furlong discloses the method as in the parent claim 5.

Furlong further discloses wherein the step of replacing the one or more idle field data characters with the physical link layer data characters further comprises replacing one or more idle field data characters with an additional input data character (Fig. 2, "data 75" and col. 2, line 65 – col. 3, line 4, disclosing inserting a WAN management frame that includes a "data byte 75", i.e., an additional input data character).

10. **As to Claim 8**, Furlong discloses the method as in the parent claim 2.

Furlong further discloses wherein the step of replacing one or more idle data field characters with the physical link layer data characters further comprises the step of replacing one or more idle field data characters with an end input data character. (Fig. 2, "EOF 77" and col. 2, line 65 – col. 3, line 4, disclosing inserting a WAN management frame that includes a "end of frame delimiter byte 77", i.e., an end input data character).

11. **As to Claim 9**, Furlong discloses the method as in the parent claim 2.

Furlong further discloses wherein the step of detecting the physical link layer data comprises activating a data extraction de-multiplexer when the receiver detects

one or more start data insertion multiplexer characters (Fig. 2, “SOF 71” and col. 2, line 65 – col. 3, line 4, disclosing that a WAN management frame includes a SOF start of frame delimiter byte; also col. 2, lines 61-64, disclosing the receiving device extracting the WAN management frame when such frame is detected; thus all of the above discloses “activating a data extraction de-multiplexer when the receiver detects one or more start data insertion multiplexer characters”).

As to Claim 10, Furlong discloses a packet based communication system comprising one or more transmitters (Fig. 1, "locally managed device 54", "telco, isp ..."), one or more transmission media (Fig. 1, “remote communications path 60”) and one or more receivers (Fig. 2, “remote device 56”) wherein at least one of the one or more transmitters comprises a data insertion multiplexer for generating and inserting physical link layer data (Fig. 6, “tx mgmt packet inserter 120B1/A2”, disclosing a data insertion multiplexer), and at least one of the one or more receivers comprises a data extraction de-multiplexer for detecting and extracting the physical link layer data (Fig. 6, “rx mgmt packet extractor 120A1/B2”, disclosing a data extraction demultiplexer).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER CHENG whose telephone number is (571)272-9021. The examiner can normally be reached on M-Th, 8:00AM - 5:00PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick W. Ferris can be reached on (571)272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. C./
Examiner, Art Unit 2463

/Ian N. Moore/

Primary Examiner, Art Unit 2463